

PATENT ABSTRACTS OF JAPAN

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(54) RETRIEVAL SYSTEMRETRIEVING DEVICE AND METHODDISPLAYING
METHOD FOR RETRIEVED RESULTTERMINAL EQUIPMENTAND RECORDING
MEDIUM

(57)Abstract:

PROBLEM TO BE SOLVED: To make it possible to retrieve broadcasted contents even when an accurate keyword is unknown.

SOLUTION: A user receives contents broadcasted from a broadcasting station 12. When the user depresses a button 20 on a bookmarker 4 time information is stored. The time information is transferred to a retrieval 10 through a gateway device 11. The engine retrieves contents broadcasted at time on the basis of the time information and returns retrieved results possibly received by the user to the device 11. The user suitably selects one of the retrieved results and when the contents are a musical piece listens the program through the device 11. When the contents are a commercial(CM) program a means for moving to the site 501 of an advertiser 500 is displayed on the device 11. The user can display the site 501 only by executing operation based on the display and purchase a commodity. Thus the user can obtain necessary information only by depressing the button 20 on the bookmarker 4 at the time of listening a broadcast.

CLAIMS

[Claim(s)]

[Claim 1]A search system which searches broadcast contents comprising:
A memory measure which memorizes information corresponding to time when contents were broadcast at least by predetermined operation.
An input device provided with the 1st means of communication that transmits

outside information corresponding to the above-mentioned time memorized by the above-mentioned memory measure.

An accumulation means which information which shows contents and broadcast times of these contents are matched and is accumulated.

A search means to retrieve information which shows the above-mentioned contents accumulated in the above-mentioned accumulation means based on information corresponding to time.

[Claim 2] A search system wherein information relevant to contents is also included in information which shows the above-mentioned contents in the search system according to claim 1.

[Claim 3] In the search system according to claim 1 the above-mentioned retrieval device information which shows the above-mentioned contents broadcast at time shown using information corresponding to the above-mentioned time based on information corresponding to the above-mentioned time. A search system transmitting information which shows 1 or two or more contents which were broadcast before in time than these contents to the above-mentioned terminal unit as a result of the above-mentioned search.

[Claim 4] In the search system according to claim 1 by performing predetermined operation to the above-mentioned terminal unit according to a display based on a result of the above-mentioned search of the above-mentioned search means displayed on the above-mentioned displaying means. A search system characterized by making it move to other sites which can purchase contents obtained by a result of the above-mentioned search.

[Claim 5] A search system indicating that information corresponding to the above-mentioned time moves it to the above-mentioned terminal unit from the above-mentioned input device in the search system according to claim 1 when the above-mentioned displaying means receives information corresponding to the above-mentioned time by the 2nd means of communication of the above virtually.

[Claim 6] In the search system according to claim 5 the above-mentioned input device It has further other displaying means which perform a display according to the number of information corresponding to the above-mentioned time memorized by the above-mentioned memory measure the above by the above-mentioned terminal unit at the time of the 2nd means of communication of the above receiving information corresponding to the above-mentioned time -- a search system wherein a virtual display and a display according to the number of the above-mentioned information by the above-mentioned input device are mutually made in relation.

[Claim 7] If the above-mentioned number of a display corresponding to the number of information corresponding to the above-mentioned time displayed on a displaying means besides the above decreases in the search system according to claim 6 A search system wherein a display corresponding to the number of information corresponding to the above-mentioned time displayed on the above-mentioned displaying means with which the above-mentioned terminal unit is

provided is increased.

[Claim 8]A search system characterized by the above-mentioned terminal unit being information terminal equipment installed for the public in the search system according to claim 1.

[Claim 9]A search systemwherein the above-mentioned terminal unit consists of personal computers in the search system according to claim 1.

[Claim 10]A search system characterized by the above-mentioned contents being musical pieces in the search system according to claim 1.

[Claim 11]In the search system according to claim 10the above-mentioned terminal unitBy performing predetermined operation according to a display based on a result of the above-mentioned search of the above-mentioned search means which has further a sound reproduction means which reproduces voice dataand was displayed on the above-mentioned displaying means. A search system reproducing the above-mentioned voice data which required voice data corresponding to a musical piece obtained by a result of the above-mentioned search from the above-mentioned retrieval deviceand was transmitted from the above-mentioned retrieval device by the above-mentioned sound reproduction means.

[Claim 12]A search system characterized by the above-mentioned contents being merchandise information in the search system according to claim 1.

[Claim 13]In the search system according to claim 1the above-mentioned retrieval deviceA search system having further an interface means which can change broadcast times of information which shows the above-mentioned contents accumulated in the above-mentioned accumulation meansand/or the above-mentioned contents from the exterior filtered by predetermined.

[Claim 14]In the search system according to claim 1the above-mentioned input deviceA search system characterized by what it has further a program store means by which a control program which controls self is memorizedand the above-mentioned control program is transmitted to the above-mentioned input device from the above-mentioned terminal unit by the 1st and 2nd means of communication of the aboveand is memorized by the above-mentioned program store means.

[Claim 15]A search systemwherein the above-mentioned control program is transmitted to the above-mentioned terminal unit from the above-mentioned retrieval device and is further transmitted to the above-mentioned input device from this terminal unit by the 3rd means of communication of the above in the search system according to claim 14.

[Claim 16]In the search system according to claim 14the above-mentioned terminal unitA search system which having a connecting means linked to a predetermined network furthertransmitting the above-mentioned control program to this terminal unit via the above-mentioned predetermined network connected to the above-mentioned terminal unit by the above-mentioned connecting meansand transmitting to the above-mentioned input device further from this terminal unit.

[Claim 17]In the search system according to claim 14the above-mentioned

terminal unitA search system which having further a reading means which reads data recorded on a predetermined recording mediumreading the above-mentioned control program from the above-mentioned predetermined recording medium by the above-mentioned reading meansand transmitting to the above-mentioned input device.

[Claim 18]A terminal unit comprising:

The 1st means of communication that receives time information corresponding to predetermined time from an input deviceand transmitted information corresponding to the above-mentioned time outside in a terminal unit which directs search of broadcast contents.

To a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to timefrom an accumulation means in which information which shows contentsand broadcast times of these contents are matched and accumulated. The 2nd means of communication that receives a result of the above-mentioned search which transmitted information corresponding to the above-mentioned time received by the 1st means of communication of the aboveand was transmitted from the above-mentioned retrieval device.

A display based on information corresponding to the above-mentioned time received by the 1st means of communication of the above.

A displaying means which performs a display based on a result of the above-mentioned search by the above-mentioned retrieval device.

[Claim 19]A terminal unitwherein information relevant to contents is also included in information which shows the above-mentioned contents in the terminal unit according to claim 18.

[Claim 20]Information which shows the above-mentioned contents broadcast in the terminal unit according to claim 18 at time shown using information corresponding to the above-mentioned timeA terminal unitwherein information which shows 1 or two or more contents which were broadcast before in time than these contents is displayed on the above-mentioned displaying means as a result of search by the above-mentioned retrieval device made based on information corresponding to the above-mentioned time of 1.

[Claim 21]A terminal unit characterized by making it move to other sites which can purchase contents obtained by a result of the above-mentioned search by performing predetermined operation in the terminal unit according to claim 18 according to a display based on a result of the above-mentioned search of the above-mentioned search means displayed on the above-mentioned displaying means.

[Claim 22]A terminal unit when the above-mentioned displaying means receives information corresponding to the above-mentioned time from the above-mentioned input device in the terminal unit according to claim 18wherein it indicates that information corresponding to the above-mentioned time is moved from the above-mentioned input device virtually.

[Claim 23]A display according to the number of the above-mentioned information by the above-mentioned input device displayed on other displaying means which perform a display according to the number of information corresponding to the above-mentioned time memorized in the terminal unit according to claim 22 by the above-mentioned memory measure with which the above-mentioned input device is providedthe above -- a terminal unit making in relation mutually [a display / when a virtual display and a display according to the number of the above-mentioned information by the above-mentioned input device receive information corresponding to the above-mentioned time from the above-mentioned input device].

[Claim 24]If this number of a display corresponding to the number of information corresponding to the above-mentioned time displayed on a displaying means besides the above of the above-mentioned input device decreases in the terminal unit according to claim 23A search systemwherein a display corresponding to the number of information corresponding to the above-mentioned time displayed on the above-mentioned displaying means is increased.

[Claim 25]A terminal unit being information terminal equipment installed for the public in the terminal unit according to claim 18.

[Claim 26]A terminal unit consisting of personal computers in the terminal unit according to claim 18.

[Claim 27]In the terminal unit according to claim 18the above-mentioned contentsIt is a musical piece and the above-mentioned terminal unit is performing predetermined operation according to a display based on a result of the above-mentioned search of the above-mentioned search means which has further a sound reproduction means which reproduces voice dataand was displayed on the above-mentioned displaying meansA terminal unit reproducing the above-mentioned voice data which required voice data corresponding to a musical piece obtained by a result of the above-mentioned search from the above-mentioned retrieval deviceand was transmitted from the above-mentioned retrieval device by the above-mentioned sound reproduction means.

[Claim 28]A terminal unit transmitting a control program for controlling the above-mentioned input device to the above-mentioned input device by the 1st means of communication of the above in the terminal unit according to claim 18.

[Claim 29]A terminal unit transmitting the above-mentioned control program by the 2nd means of communication of the above from the above-mentioned retrieval deviceand transmitting it to the above-mentioned input device further in the terminal unit according to claim 18.

[Claim 30]A terminal unit characterized by having a connecting means linked to a predetermined network further in the terminal unit according to claim 18transmitting the above-mentioned control program from the above-mentioned predetermined network by the above-mentioned connecting meansand making it transmit to the above-mentioned input device further.

[Claim 31]A terminal unit which having further a reading means which reads data recorded on a predetermined recording medium in the terminal unit according to

claim 18reading the above-mentioned control program from the above-mentioned predetermined recording medium by the above-mentioned reading meansand transmitting to the above-mentioned input device.

[Claim 32]A memory measure which memorizes time information corresponding to predetermined time by predetermined operation in a terminal unit which directs search of broadcast contentsTo a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to timefrom an accumulation means in which information which shows contentsand broadcast times of these contents are matched and accumulated. A means of communication which receives a result of the above-mentioned search which transmitted information corresponding to the above-mentioned time memorized to the above-mentioned memory measureand was transmitted from the above-mentioned retrieval deviceA terminal unit having a displaying means which performs a display based on information corresponding to the above-mentioned time memorized by the above-mentioned memory measureand a display based on a result of the above-mentioned search by the above-mentioned retrieval device.

[Claim 33]Information which shows the above-mentioned contents broadcast in the terminal unit according to claim 32 at time shown using information corresponding to the above-mentioned timeA terminal unitwherein information which shows 1 or two or more contents which were broadcast before in time than these contents is displayed on the above-mentioned displaying means as a result of search by the above-mentioned retrieval device made based on information corresponding to the above-mentioned time of 1.

[Claim 34]In the terminal unit according to claim 32the above-mentioned contentsIt is a musical piece and the above-mentioned terminal unit is performing predetermined operation according to a display based on a result of the above-mentioned search of the above-mentioned search means which has further a sound reproduction means which reproduces voice dataand was displayed on the above-mentioned displaying meansA terminal unit reproducing the above-mentioned voice data which required voice data corresponding to a musical piece obtained by a result of the above-mentioned search from the above-mentioned retrieval deviceand was transmitted from the above-mentioned retrieval device by the above-mentioned sound reproduction means.

[Claim 35]A database with which information which shows contentsand broadcast times of these contents are matched and accumulated in a retrieval device with which broadcast contents are searchedIt has a communication interface for receiving time information corresponding to predetermined timeand identification information of contents from external apparatusA retrieval device retrieving information which shows the above-mentioned contents based on time information corresponding to time which received [above-mentioned]and identification information of the above-mentioned contents.

[Claim 36]A retrieval device transmitting search results to apparatus of the above-mentioned exterior via the above-mentioned communication interface in

the retrieval device according to claim 35 further.

[Claim 37]A search method comprising:

A step of memory which memorizes information corresponding to time when contents were broadcast at least to a memory measure by predetermined operation of an input device in a search method which searches broadcast contents.

A step of the 1st communication that transmits outside information corresponding to the above-mentioned time memorized by the above-mentioned memory measure.

A step of search which retrieves information which shows the above-mentioned contents which information which shows contentsand broadcast times of these contents were matchedwere accumulated in an accumulation meansand were accumulated in the above-mentioned accumulation means based on information corresponding to time with a retrieval device.

A step of the 2nd communication that receives information corresponding to the above-mentioned time transmitted by a step of communication of the above 1st from the above-mentioned input deviceA step of the 3rd communication that receives a result of the above-mentioned search which transmitted information corresponding to the above-mentioned time received by a step of communication of the above 2nd to the above-mentioned retrieval deviceand was transmitted from the above-mentioned retrieval deviceA step of the 2nd display that performs the 2nd display based on a result of the above-mentioned search by a step and the above-mentioned retrieval device of the 1st display that performs the 1st display based on information corresponding to the above-mentioned time received by a step of communication of the above 2nd.

[Claim 38]A search method which searches broadcast contentscomprising:

A receiving step which receives time information corresponding to predetermined timeand identification information of contents from external apparatus.

A searching step which retrieves information which shows the above-mentioned contents based on time information corresponding to time which received [above-mentioned]and identification information of the above-mentioned contents from a database with which information which shows contentsand broadcast times of these contents are matched and accumulated.

A transfer step which transmits search results searched in the above-mentioned searching step to apparatus of the above-mentioned exterior.

[Claim 39]The method of presentation of search results of broadcast contents in a terminal unit characterized by comprising the following.

The 1st communication step that receives time information corresponding to predetermined time from an input device in the method of presentation of search results of broadcast contents in a terminal unit.

The 2nd communication step that transmitted information corresponding to the above-mentioned time outside.

To a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated. The 3rd communication step that transmits information corresponding to the above-mentioned time received by the 1st communication step of the above.

A displaying step which performs a display based on information corresponding to the above-mentioned time received by the 4th communication step that receives a result of search transmitted from the above-mentioned retrieval device and the 1st communication step of the above and a display based on a result of the above-mentioned search received by the 4th communication step of the above.

[Claim 40] In the method of presentation of search results of broadcast contents in a terminal unit A memory step which memorizes time information corresponding to predetermined time by predetermined operation To a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated. The 1st communication step that transmits information corresponding to the above-mentioned time memorized in the above-mentioned memory step The 2nd communication step that receives a result of the above-mentioned search transmitted from the above-mentioned retrieval device The method of presentation of search results of broadcast contents in a terminal unit having a displaying step which performs a display based on information corresponding to the above-mentioned time memorized by the above-mentioned memory measure and a display based on a result of the above-mentioned search received in the 2nd communication step of the above.

[Claim 41] It is the recording medium which recorded a control program for displaying search results of contents in a terminal unit Make time information corresponding to predetermined time receive from an input device and information corresponding to the above-mentioned time is made to transmit outside To a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated. A recording medium which recorded a control program for displaying search results of contents in a terminal unit displaying a result of the above-mentioned search which made receive a result of search which made transmit information corresponding to the above-mentioned time and was transmitted from the above-mentioned retrieval device and was received at least.

[Claim 42] It is the recording medium which recorded a control program for displaying search results of contents in a terminal unit To a retrieval device with which information which shows the above-mentioned contents was retrieved based on information corresponding to time from a database with which

information which makes time information corresponding to predetermined time memorize by predetermined operationand shows contentsand broadcast times of these contents are matched and accumulated. A result of the above-mentioned search which made transmit information corresponding to the memorized above-mentioned timeand was transmitted from the above-mentioned retrieval device is made to receiveA recording medium which recorded a control program for displaying search results of contents in a terminal unit displaying a result of the above-mentioned search by the above-mentioned retrieval device at least.

[Claim 43]It is the recording medium which recorded a control program for input devices which inputs information corresponding to time into a retrieval deviceThe above-mentioned time information which made memorize time information which shows predetermined time by a user's operationand was memorized is made to transmit outsideTo a retrieval device with which information which shows contents is retrieved based on time information it was broadcast that contents werefrom a database with which information which shows contentsand broadcast times of these contents are matched and accumulated. A recording medium which recorded a control program for input devices for making information corresponding to time input.

[Claim 44]A recording medium which recorded a control program for input deviceswherein the above-mentioned program makes a display which shows the number of the above-mentioned time information memorized further perform in the recording medium according to claim 43.

[Claim 45]It is the recording medium which recorded a control program for input devices which has a counter which operates with a predetermined clock and inputs information corresponding to time into a retrieval deviceCounted value of the above-mentioned counter at the time of predetermined is made to memorize by a user's operationTo a retrieval device with which information which shows contents is retrieved based on time information it was broadcast that contents were from a database with which information which makes the memorized above-mentioned counted value transmit outsideand shows contentsand broadcast times of these contents are matched and accumulated. A recording medium which recorded a control program for input devices for making information corresponding to time input.

[Claim 46]A recording medium which recorded a control program for input deviceswherein the above-mentioned program makes a display which shows the number of the above-mentioned counted value memorized further perform in the recording medium according to claim 45.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to the search system which retrieves

the broadcast information after that broadcast and can acquire it exactlya retrieval devicea search method and the method of presentation of search resultsa terminal unitand a recording medium.

[0002]

[Description of the Prior Art]The database system with which the data which was stored on the computer system and put in a database from the former is searched existed. The user operated the terminal unit etc. which were directly connected to database system in the networkand had acquired required information. For examplea user inputs the keyword considered to be suitable from a terminal unit. Based on the inputted keywordit refers to database systemand a user is provided with search results via a terminal unit. When the provided information is a large numberthe user can perform search which set up and narrowed down the keyword further to the provided information.

[0003]Herethe case where a user searches music data is considered using the database system which accumulated music data. The user can know the title information etc. of CD (Compact Disc) in which the desired musical piece was recordedfor example based on search resultsand can make it the reference at the time of purchasing the CD. Heremusic data is the information about a musical piecefor exampleand it consists of each informationincluding a musical piece namea performer's namean inclusion album namei.e.the title of an audio CDan announcement yeara distributoretc. The voice data of a musical piece itself may be included in music data. In database systemthe subordinate information on the music dataincluding the performer's name of the musical piecea titlean inclusion album nameetc.is partly set up as a keyword as opposed to one music data.

[0004]For examplea user is pleased with the musical piece which was flowing by the radio broadcast by chanceand suppose that a user wants to acquire information about the musical piece. In that casea user searches a musical piece after the broadcast using a music database which was mentioned above. For exampleit searches by setting up a keyword based on the accompanying information of the musical piece obtained by announcer's introduction etc. broadcast with the musical piece.

[0005]

[Problem(s) to be Solved by the Invention]The result expected that a keyword is not inputted exactly is not obtained in the conventional music database mentioned above. Thereforein the formerwhen a user searched and the accompanying information etc. of the musical piece broadcast with the pleasing musical piece were forgottenthere was a problem that the target information could not be acquired.

[0006]Referring to this terminal unitwhenever it always walks around with a terminal unit for a user to search a music database and a pleasing musical piece flows by a radio broadcast is also considered. Howevversince the user was not able to know accompanying information of the musical piece when it is heard from the middle of a user being a musical piece and the musical piece is pleasingthere was a problem that there was no telling anything I may input as a keyword also for

referring to the terminal unit for search.

[0007]Therefore the contents provider who sells a musical piece or CD had the problem that it was not directly connected with the sales of contents easily although the musical piece is passed by the radio broadcast with much trouble.

[0008]In the case of digital broadcasting also making accompanying information superimpose on the music data broadcast is considered. The information about the musical piece it was broadcast by doing in this way that a user was can be obtained with digital data. However accompanying information needed to be made to create and superimpose by the broadcasting station side in this case for every music data to transmit and there was a problem that a big burden was placed on the broadcasting station side. The user side also had the problem that it was necessary to prepare the receiving set of composition so that the accompanying information on which it was superimposed may be taken out.

[0009]Therefore the purpose of this invention is to provide the search system the retrieval device the search method and the method of presentation of search results terminal unit and recording medium it enabled it to search even if an exact keyword did not understand the broadcast contents.

[0010]

[Means for Solving the Problem]The 2nd means of communication that receives information corresponding to time when this invention was transmitted by the 1st means of communication from a retrieval device and an input device The 3rd means of communication that receives a result of search which transmitted information corresponding to time received by the 2nd means of communication to a retrieval device and was transmitted from a retrieval device A display based on information corresponding to time received by the 2nd means of communication A search system which searches broadcast contents in order to solve SUBJECT which is characterized by that a search system having a terminal unit provided with a displaying means which performs a display based on a result of search by a retrieval device comprises the following and which was mentioned above.

A memory measure which memorizes information corresponding to time when contents were broadcast at least by predetermined operation.

An input device provided with the 1st means of communication that transmits outside information corresponding to time memorized by memory measure.

An accumulation means which shows contents and broadcast times of contents are matched and is accumulated.

A search means to retrieve information which shows contents accumulated in an accumulation means based on information corresponding to time.

[0011]A terminal unit whose this invention is characterized by that a terminal unit comprises the following and which directs search of broadcast contents.

The 1st means of communication that receives information corresponding to time transmitted from an input device which transmitted outside information corresponding to time which memorized information corresponding to time when

contents were broadcast at least to a memory measure by predetermined operationand was memorized by memory measure.

To a retrieval device with which information which shows contents was retrieved based on information corresponding to timefrom an accumulation means in which information which shows contentsand broadcast times of contents are matched and accumulated. The 2nd means of communication that receives a result of search which transmitted information corresponding to time received by the 1st means of communicationand was transmitted from a retrieval device.

A display based on information corresponding to time received by the 1st means of communication.

A displaying means which performs a display based on a result of search by a retrieval device.

[0012]A terminal unit whose this invention is characterized by that a terminal unit comprises the following and which directs search of broadcast contents.

A memory measure which memorizes information corresponding to time when contents were broadcast at least by predetermined operation.

To a retrieval device with which information which shows contents was retrieved based on information corresponding to timefrom an accumulation means in which information which shows contentsand broadcast times of contents are matched and accumulated. A means of communication which receives a result of search which transmitted information corresponding to time memorized to a memory measureand was transmitted from a retrieval device.

A display based on information corresponding to time memorized by memory measure.

A displaying means which performs a display based on a result of search by a retrieval device.

[0013]In a retrieval device with which this invention searches broadcast contentsA database which information which shows contentsand broadcast times of these contents are matchedand is accumulatedIt has a communication interface for receiving time information corresponding to predetermined timeand identification information of contents from external apparatusIt is a retrieval device retrieving information which shows contents based on time information corresponding to received timeand identification information of contents.

[0014]A search method which is characterized by that a search method comprises the following and which searches broadcast contents.

A step of memory which memorizes information corresponding to time when contents were broadcast at least to a memory measure by predetermined operation of an input device.

A step of the 1st communication that transmits outside information corresponding to time memorized by memory measure.

A step of search which retrieves information which shows contents which information which shows contentsand broadcast times of contents were

matched were accumulated in an accumulation means and were accumulated in an accumulation means based on information corresponding to time with a retrieval device.

A step of the 2nd communication that receives information corresponding to time transmitted by a step of the 1st communication from an input device A step of the 3rd communication that receives a result of search which transmitted information corresponding to time received by a step of the 2nd communication to a retrieval device and was transmitted from a retrieval device A step of the 2nd display that performs the 2nd display based on a result of a step of the 1st display and search by a retrieval device which perform the 1st display based on information corresponding to time received by a step of the 2nd communication.

[0015]A search method which is characterized by that a search method comprises the following and which searches broadcast contents.

A receiving step which receives time information corresponding to predetermined time and identification information of contents from external apparatus.

A searching step which retrieves information which shows contents based on time information corresponding to time received from a database with which information which shows contents and broadcast times of these contents are matched and accumulated and identification information of contents.

A transfer step which transmits search results searched in a searching step to external apparatus.

[0016]The method of presentation of search results of broadcast contents in a terminal unit whose this invention is characterized by that the method of presentation of search results of broadcast contents in a terminal unit comprises the following.

The 1st communication step that receives time information corresponding to predetermined time from an input device.

The 2nd communication step that transmitted information corresponding to time outside.

The 3rd communication step that transmits information corresponding to time received by the 1st communication step to a retrieval device with which information which shows contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated.

A displaying step which performs the 4th communication step that receives a result of search transmitted from a retrieval device a display based on information corresponding to time received by the 1st communication step and a display based on a result of search received by the 4th communication step.

[0017]The method of presentation of search results of broadcast contents in a terminal unit whose this invention is characterized by that the method of presentation of search results of broadcast contents in a terminal unit comprises

the following.

A memory step which memorizes time information corresponding to predetermined time by predetermined operation.

The 1st communication step that transmits information corresponding to time memorized in a memory step to a retrieval device with which information which shows contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated.

The 2nd communication step that receives a result of search transmitted from a retrieval device.

A displaying step which performs a display based on information corresponding to time memorized by memory measure and a display based on a result of search received in the 2nd communication step.

[0018] This invention is the recording medium which recorded a control program for displaying search results of contents in a terminal unit. It makes time information corresponding to predetermined time receive from an input device and information corresponding to time is made to transmit outside. To a retrieval device with which information which shows contents was retrieved based on information corresponding to time from a database with which information which shows contents and broadcast times of these contents are matched and accumulated. It is the recording medium which recorded a control program for displaying search results of contents in a terminal unit displaying a result of search which made receive a result of search which made transmit information corresponding to time and was transmitted from a retrieval device and was received at least.

[0019] This invention is the recording medium which recorded a control program for displaying search results of contents in a terminal unit. To a retrieval device with which information which shows contents was retrieved based on information corresponding to time from a database with which information which makes time information corresponding to predetermined time memorize by predetermined operation and shows contents and broadcast times of these contents are matched and accumulated. It is the recording medium which recorded a control program for displaying search results of contents in a terminal unit making a result of search which made transmit information corresponding to memorized time and was transmitted from a retrieval device receive and displaying a result of search by a retrieval device at least.

[0020] This invention is the recording medium which recorded a control program for input devices which inputs information corresponding to time into a retrieval device. Time information which made memorize time information which shows predetermined time by a user's operation and was memorized is made to transmit outside. To a retrieval device with which information which shows contents is retrieved based on time information it was broadcast that contents were from a database with which information which shows contents and broadcast times of these contents are matched and accumulated. It is the recording medium which

recorded a control program for input devices for making information corresponding to time input.

[0021]It is the recording medium which recorded a control program for input devices which this invention has a counter which operates with a predetermined clock and inputs information corresponding to time into a retrieval device. Counted value of a counter at the time of predetermined is made to memorize by a user's operation. To a retrieval device with which information which shows contents is retrieved based on time information it was broadcast that contents were from a database with which information which makes memorized counted value transmit outside and shows contents and broadcast times of these contents are matched and accumulated. It is the recording medium which recorded a control program for input devices for making information corresponding to time input.

[0022]As mentioned above a search system and a search method by this invention. In an input device it is transmitted outside by information corresponding to time when contents were broadcast at least memorized by memory measure by predetermined operation and in a retrieval device. Information which shows contents and broadcast times of contents are matched and it is accumulated in an accumulation means. It is retrieved by information which shows contents accumulated in an accumulation means based on information corresponding to time and in a terminal unit. A display based on information corresponding to time which received a result of search which received information corresponding to time transmitted from an input device transmitted information corresponding to received time to a retrieval device and was transmitted from a retrieval device and was transmitted from an input device. Since a display based on a result of search transmitted from a retrieval device is performed information which shows contents which were searched with a retrieval device based on information corresponding to time when contents were broadcast inputted into an input device and which were broadcast at the time can be displayed on a terminal unit.

[0023]A database with which information which shows contents and broadcast times of these contents are matched and a retrieval device by this invention is accumulated. It has a communication interface for receiving time information corresponding to predetermined time and identification information of contents from external apparatus. Since he is trying to retrieve information which shows contents based on time information corresponding to received time and identification information of contents information which shows contents from information corresponding to time can be retrieved.

[0024]A terminal unit by this invention memorizes information corresponding to time when contents were broadcast at least to a memory measure by predetermined operation. Were transmitted from an input device which transmitted outside information corresponding to time memorized by memory measure. To a retrieval device with which information which shows contents was retrieved based on information corresponding to time from an accumulation means in which information which receives information corresponding to time and shows contents and broadcast times of contents are matched and accumulated. A display

based on information corresponding to time which received a result of search which transmitted information corresponding to time received from an input deviceand was transmitted from a retrieval deviceand was received from an input deviceIn order to perform a display based on a result of search by a retrieval deviceinformation which shows contents which were searched with a retrieval device based on information corresponding to time when contents were broadcast inputted into an input deviceand which were broadcast at the time can be displayed.

[0025]The method of presentation of search results by this inventionTo a retrieval device with which information which shows contents was retrieved based on information corresponding to timefrom a database with which information which shows contentsand broadcast times of these contents are matched and accumulated. A display based on information corresponding to [a result of search which transmitted information corresponding to time from an input deviceand was transmitted from a retrieval device is receivedand] time from an input deviceIn order for a terminal unit to perform a display based on a result of search from a retrieval devicesearch results searched with a retrieval device based on information corresponding to time displayed on a terminal unit can be seen on a terminal unit.

[0026]A recording medium by this invention makes time information corresponding to predetermined time receive from an input deviceTo a retrieval device with which information which shows contents was retrieved based on information corresponding to time from a database with which information which makes information corresponding to time transmit outsideand shows contentsand broadcast times of these contents are matched and accumulated. A result of search which made transmit information corresponding to time and was transmitted from a retrieval device is made to receiveSince a control program for displaying search results of contents in a terminal unit displaying a result of search received at least is recordedIn a computer which can read a recording mediumsearch results of contents by a retrieval device made based on time information corresponding to predetermined time of an input device can be displayed.

[0027]A recording medium by this invention makes time information corresponding to predetermined time memorize by predetermined operationTo a retrieval device with which information which shows contents was retrieved based on information corresponding to timefrom a database with which information which shows contentsand broadcast times of these contents are matched and accumulated. A result of search which made transmit information corresponding to memorized timeand was transmitted from a retrieval device is made to receiveSince a control program for displaying search results of contents in a terminal unit displaying a result of search by a retrieval device at least is recordedIn a computer which can read a recording mediumsearch results of contents by a retrieval device made based on time information corresponding to predetermined time memorized based on predetermined operation can be displayed.

[0028]A recording medium by this invention makes information corresponding to predetermined time memorize by a user's operationTo a retrieval device with which information which shows contents is retrieved based on time information it was broadcast that contents were from a database with which information which makes information corresponding to memorized predetermined time transmit outsideand shows contentsand broadcast times of these contents are matched and accumulated. Since a control program for input devices for making information corresponding to time input is recordedinformation corresponding to predetermined time for searching a recording medium with a retrieval device to an input device in a computer which can be read can be made to memorize by a user's operation.

[0029]

[Embodiment of the Invention]Hereafterthis invention is explained. Firstthe outline of this invention is explained. Drawing 1 shows the information retrieval system by this invention roughly. This system consists of the search engine 3 which searches to the two databases 1 and 2 and these databases 1 and 2and the additional terminal 4 which provides the assistance about a search condition to a user.

[0030]The information relevant to the broadcasting media of the contents it was broadcastfor example by broadcasting mediasuch as a radio broadcastthat the databases 1 were is accumulated. For examplethe musical piece name broadcast in the radio stationand the time information and broadcasting station information it was broadcast that the musical piece was are associated mutuallyand are accumulated in the database 1. Of coursethe information about the contents of broadcasting media other than a radio broadcast may be accumulated in the database 1and the contents at this time may not be restricted to the information about a musical piecefor examplemerchandise information etc. may be sufficient.

[0031]The accompanying information of a musical piece relates with a musical piece nameand is accumulated in the database 1. The accompanying information of a musical piece consists of the information of the player of the number and CD title information of the audio CD on which the musical piece was recordedand its musical piecea composeretc. and also words of the musical piecedescriptionetc.for example. It may be made to accumulate the accompanying information of these musical pieces in other databases which can be searched from the bookmark search engine 4.

[0032]Herebroadcasting media are radio broadcastsand it explains that the contents provided from broadcasting media are musical pieces.

[0033]The information about the contents themselves by which the database 2 is accumulated in the database 1 is accumulated. For examplewhen contents are the musical pieces broadcast by broadcasting mediait relates with a musical piece name and the information about the contents themselvesincluding the album (CD) name and the player information that the musical piece was recordeda distributora release dateetc.is accumulated. The customer data to this system can be accumulated in the database 2. The information on others about a customer's ID information based on identification information peculiar to the additional terminal 4

mentioned later and a customer is accumulated in the database 2.

[0034]The search engine 3 retrieves the information accumulated in the database 1 based on the search condition specified by the user. An engine here refers to a mass of composition which provides a specific functionand the search engine 3 provides a predetermined search service to a user.

[0035]If a user understands the broadcasting station and place where the musical piece was broadcastand the broadcast time when the musical piece broadcastfor example with radio is pleasinghe will specify the place information 5the broadcasting station information 6and the time information 7 as a search condition to the search engine 3. The search engine 3 searches the database 1 based on the set-up search conditionfor exampleoutputs a musical piece name as search results. The distributor of the album name on which the database 2 was searched by the search engine 3 by having made this musical piece name into the search conditionfor examplethat musical piece was recordedor its albumplayer informationetc. are outputted. The search results of the database 2 are returned to a user.

[0036]On the other handeven if a user thinks that he will search the musical piece which hears and is pleased with broadcastit knows [the above-mentioned information 5and 7 as a search condition] or is sometimes ambiguous. In this inventionthe user holds beforehand the additional terminal 4 for acquiring the time information 7. It registers with the database 2 beforehand with it by making the place information 5 and the broadcasting station information 6 according to a user into customer data.

[0037]Namelyif a user is pleased with the broadcast musical piecehe will operate the additional terminal 4 and will store time information 7' at that time in the additional terminal 4. Laterbased on time information 7' memorized by the additional terminal 4search is directed to the search engine 3. The search engine 3 searches the database 1 by making into a search condition this time information 7'and a user's place information 5 and broadcasting station information 6 which are beforehand registered into the database 2. The database 2 is searched based on the musical piece name acquired as search results. The outputted search results are returned to a user as a candidate of the information for which a user wishes.

[0038]Thuswhen the musical piece it was broadcast by using the system by this inventionfor example that a user was is pleasingthe information on hope can be acquired by operating the additional terminal 4 and storing time information 7' in the additional terminal 4.

[0039]Nextthe 1st gestalt of implementation of this invention is explained. Drawing 2 shows an example of the composition of the composition data search system by the 1st gestalt of this operation. In drawing 2the same number is given to the portion which is common in drawing 1 mentioned aboveand detailed explanation is omitted. The bookmark search engine 10 comprises the database 1the database 2and the search engine 3. The bookmark search engines 10 are communication linessuch as the Internetand are connected to other websites which are not illustrated.

[0040]A website is a place on which the information released to a network is putand this bookmark search engine 10 is also one of the websites. For examplethe bookmark search engine 10 is not illustrated as other websitesand database connection is made. The place of a website is described by the address information called URL (Uniform Resource Locator).

[0041]The broadcasting station 12 is a radio stationfor exampleand broadcasts a musical piece etc. as contents based on the play list created beforehand. A play list may be created after broadcast. Of coursea musical piecemerchandise informationand other information are also broadcast as contents. The broadcasting station 12 may be a cable-broadcasting office etc. which broadcast with a cable focusing on the Television Sub-Division broadcasting station which performs television broadcasting not only with a radio station but with radio or a cableCATV (Cable Television)and a musical piece.

[0042]The bookmark search engine 10 and the broadcasting station 12 are connected by communication linessuch as the Internet. An above-mentioned play list is transmitted from the broadcasting station 12 to the bookmark search engine 10. In the bookmark search engine 10the play list who received is accumulated in the database 1. Drawing 3 shows a play list's example. To one contentsfor examplethe broadcast musical piece for one musicin the example of drawing 3. The name of the broadcasting station 12 where the contents were broadcast (Station Name)Broadcasting-areas (Area) of the broadcasting station 12the broadcast start time (Start Time) of contents (musical piece)the broadcast finish time (End Time) of contentsand a contents name (Content) are matched.

[0043]The accumulation to a play list's database 1 is not restricted to the example transmitted from the broadcasting station 12 where broadcast of contents was actually performed. For examplethe play list who managed information and was broadcast with the help is createdand the created play list is supplied to the database 1 via a predetermined storageand it may be made to accumulate him. A play list is created by system with the another broadcasting station 12and it may be made to transmit to the bookmark search engine 10. Each broadcasting station can be identified in the database 1and the play list of several different broadcasting stations 12 can be accumulated in it.

[0044]By the communication lines 8such as the Internettthe bookmark search engine 10 and the gateway device 11 are connected bidirectionally. Although mentioned later for detailsthe gateway device 11 is a personal computerfor exampleand it communicates in the bookmark search engine 10 and both directionsand it can communicate with the additional terminal 4 which a user owns.

[0045]The gateway device 11 is not restricted to a personal computer. For examplethe set top box provided in order to connect a television receiver and a digital network can be used as the gateway device 11. In other examplesIRD (Integrated Reciever Decoder) which is a receiver for digital broadcasting can be used as the gateway device 11. The gateway device 11 is not restricted to what an individual can own as mentioned above. For exampleit is installed in a retail store etc. and a user can use the information terminal equipment made available

as the gateway device 11.

[0046]Drawing 4 shows an example of the appearance of the additional terminal 4 by the 1st gestalt of this operation. Below the additional terminal 4 is called the book maker 4. The book maker 4 has the indicator 21 as which the input part 20 which consists of buttons for example and the present time are displayed. The connector 22 which is an electric node at the time of communicating with the gateway device 11 mentioned above is formed.

[0047]This book maker 4 can store in the small case which comprises simple composition which is mentioned later for example can be used as a key case. Not only this example but the book maker 4 can include in other various electronic equipment. For example although an example is mentioned later the book maker 4 can include for example in a radio set. It can also carry in the car stereo system carried in a car. Of course the object incorporating the book maker 4 is not restricted to electronic equipment. When the book maker 4 includes in a thing of movement which is carried in the case [a thing] and used he is more preferred.

[0048]Drawing 5 shows an example of the composition of the book maker 4 by the 1st gestalt of this operation. Although omitted in this figure CPU (Central Processing Unit) 25 has the composition of a memory a bus predetermined Interface Division etc. The button 20 the indicator 21 the memory 26 the timer 28 Interface Division 29 and ROM (Read Only Memory) 91 are connected to CPU 25. The timer 28 is made to output the present time and proofreading of time is possible for it by control of CPU 25. The indicator 21 consists of LCD (Liquid Crystal Display) for example and display control is carried out by CPU 25. The time information outputted from the timer 28 is supplied and displayed on the indicator 21 via CPU 25. The indicator 21 can be omitted.

[0049]A program for ROM 91 to perform this book maker's 4 motion control is stored beforehand. CPU 25 controls the book maker's 4 operation based on the program stored in ROM 91. For example the display control to the indicator 21 the control corresponding to operation of the button 20 the communications control through Interface Division 29 the access control of the memory 26 etc. are made by CPU 25 based on the program stored in ROM 91.

[0050]Operation of the button 20 by a user is detected by CPU 25 and the time information at that time is memorized by the memory 26 based on the output of the timer 28. The time information can make plurality memorize to the memory 26 as an example is shown in drawing 6. Mutually the numerals by consecutive numbers are given to each of time information so that it may be identifiable.

Terminal ID 27 memorized in the predetermined region of the memory 26 is unique ID which can specify each individual of the book maker 4.

[0051]Although explained by **** that the information memorized by the memory 26 by operating the button 20 was only the identification information for identifying each of time information and time information this is not limited to this example. The memory 26 can be made to memorize time information and the classification information corresponding to the time information as an example. When a user operates the button 20 in whether the button 20 is pushed only once momentarily

or a button is pushed twice into predetermined timeand beyond predetermined timeCPU25 detects that it is continued whether pushing the button 20. Based on this detection resultclassification information is generated by CPU25and the memory 26 is made to memorize the generated classification information with identification information and time information.

[0052]For examplewhen the button 20 is pushed once momentarily. When the operation based on a radio broadcast and the button 20 are pushed twice into predetermined timeWhen the operation based on television broadcasting and the button 20 continue being pushed beyond as for predetermined timeit classifies that it is operation out of the action area of the user who mentions laterand CPU25 generates the flag which corresponds as classification informationrespectively. This flagand corresponding time information and identification information are associated mutuallyand are memorized by the memory 26.

[0053]Interface Division 29 controls communication with the exterior 11 through the connector 22i.e.a gateway device. The Interface Division standard in particular by Interface Division 29 at the time of communicating with the gateway device 11 is not limited. For exampleUSB (Universal Serial Bus) can be used as an Interface Division standard of communication with the book maker 4 and the gateway device 11. The Interface Division standard specified by IEEE-1394 can be used. RS-232C can be used as an Interface Division standard of this communication.

[0054]It is not restricted to communication by a cable as mentioned above further againfor examplethe Interface Division standard by IrDA (Infrared Data Association) is usedIt may be made to perform communication with the book maker 4 and the gateway device 11 using an infrared signal. In this casethe connector 22 and Interface Division 29 have a transmitting function of an infrared signal.

[0055]The IC card which embedded the integrated circuit and the means of communication for the book maker 4 in the cardPCMCIA (Personal Computer.) It can also constitute as a PC card by regulation of Memory Card International Association and JEIDA (Japan Electronic Industry Development Association). When the book maker 4 is constituted as an IC cardthe Interface Division standard which suited the IC card concerned as Interface Division 29 is used. When the book maker 4 is constituted as a PC cardthe connector corresponding to a PC card is providedfor example in the gateway device 11. Communication with the book maker 4 and the gateway device 11 can be performed by equipping the connector corresponding to this PC card with the book maker 4 as a PC card directly.

[0056]By instructions of CPU25terminal ID27 and time information which were memorized by the memory 26 can be read from the memory 26and can be outputted outside via Interface Division 29.

[0057]Drawing 7 shows an example of the composition of the gateway device 11. Although mentioned abovea common personal computer can be used as the gateway device 11. Drawing 7 is an example using a common personal computer as

the gateway device 11. CPU31ROM(Read Only Memory) 32RAM(Random Access Memory) 33the display control circuit 34and the storage 36for examplea hard diskare connected to the bus 30. The control signal based on a user's operation is outputtedfor examplethe input means 91 which consists of a pointing device of a keyboard and a prescribed method is connected to the bus 30. CPU25 operates based on the program memorized by ROM32 and the hard disk 36for exampleand performs predetermined processing by operation of a user's input means 91.

RAM33 is usedfor example as a work memory of CPU31. The display control signal outputted from CPU25 is supplied to the display control circuit 34and the display based on a display control signal is performed to the display 35.

[0058]Interface Division 37 for communicating with the book maker 4 is connected to the bus 30. That to which Interface Division 37 suited the Interface Division standard corresponding to the book maker's 4 Interface Division 29for exampleUSBIEEE-1394RS-232CIRDAetc. is used.

[0059]The means of communication 38 for communicating via the bookmark search engine 10 and the communication line 8 is further connected to the bus 30. The means of communication 38 is a modemfor exampleand is connected to the dial-up line as the communication line 8. Using a modemwith a dial-up linethe Internet can be accessed and the gateway device 11 can communicate in the bookmark search engine 10 and both directions via the Internetfor example.

[0060]The speech processing means 39 connected to the bus 30 changes into an analog voice signal the digital sound data supplied via the bus 30. The analog voice signal outputted from the speech processing means 39 is reproducedfor example by the loudspeaker 90.

[0061]Although mentioned above the user needs to register a user's own information into the customer database 2 of the bookmark search engine 10 beforehand. This registration can be performed using the gateway device 11. Firsta user connects the book maker 4 who owns to the gateway device 11 with predetermined Interface Division. A user operates the gateway device 11 and registers the book maker 4 whom a user and a user own.

[0062]Drawing 8 shows an example of a display of the registration picture 40 in the display 35 at the time of registering the book maker 4 whom the user and user by the gateway device 11 own. A user's name is inputted into the "name" column 41. Terminal ID27 of the book maker 4 which a user owns is inputted into the "bookmark ID" column 42.

[0063]The input of terminal ID27 mentioned above is performed by communication with the gateway device 11 and the book maker 4. That isthe demand read terminal ID27 from the gateway device 11 to the book maker 4 is transmitted. In the book maker 4terminal ID27 is read from the memory 26 by the control of CPU25 based on this demand. Terminal ID27 read is transmitted to the gateway device 11. In the gateway device 11terminal ID27 received is displayed on the "bookmark ID" column 42 of the display 35and it memorizesfor example to RAM33.

[0064]As for the "zip code" column 43 and the "long-distance number" column 44the long-distance number in the zip code and dial-up line of the area in which a

user residesfor example is inputtedrespectively. Based on the contents inputted into the columns 43 and 44the area where a user acts is shown roughly. It may be made to input a zip code or not only a long-distance number but the information which expresses the field on geographyfor example about the area where a user acts. The realm name set up uniquely beforehand can be inputted.The information as which a user specifies the radio station which chooses mostly is inputted into the "radio station" column 45. Although the broadcasting station name is inputtedit may be made to input the frequency band of a radio broadcast in addition to this in this examplefor example.

[0065]The number of a user's credit card or an ATM cardetc. are inputted into the "card No." column 46. A user's address is correctly inputted into the "address" column 47. These are information used when the service which used the book maker 4for example is accompanied by accounting.

[0066]Each information which was mentioned above and which was inputted into the columns 41–47 is memorized by RAM33respectively. And based on predetermined operationit is read from RAM33and is transmitted by the means of communication 38 to the bookmark search engine 10. It is more desirable when it enciphers by a predetermined method to each information transmitted at this time.

[0067]On the other handthe timer 28 is proofread in the book maker 4. For examplein order to register terminal ID27when the book maker 4 and the gateway device 11 are connectedTwo-way communication can be performed between the book maker 4 and the gateway device 11and the book maker's 4 timer 28 can be proofread using the time information outputted from the timer (not shown) which the gateway device 11 has.

[0068]Communication of the one way from the book maker 4 to the gateway device 11 can also perform same processing. The book maker 4 and the gateway device 11 are connectedand terminal ID27 is transmitted to the gateway device 11 from the book maker 4. With itthe time information by the timer 28 is transmitted from the book maker 4 to the gateway device 11. By the gateway device 11 sidethis transmitted time information is compared with the time information which the timer which the gateway device 11 hasand which is not illustrated showsand right time can be computed using that difference.

[0069]The time information by the timer with which the gateway device 11 is not illustrated in these cases needs to be proofread at right time by a certain method.

[0070]Although it is explained by **** that the book maker 4 has a timerthis is not limited to this example. For examplethe counter which operates with the clock of a given period can be prepared for the book maker 4and the time information which shows the time when the button 20 was pushed with the counted value of this counter can be searched for. For examplethe counted value at the time of a user operating the button 20 is memorized by the memory 26. The book maker 4 is connected to the gateway device 11and when transmitting the counted value memorized by the memory 26 to the gateway device 11the counted value in the time of transmitting is transmitted to the gateway device 11 with the counted value read from the memory 26.

[0071]On the other hand the gateway device 11 proofreads the timer which is not illustrated using a predetermined method and obtains a master clock. For example by the means of communication 38 it communicates with the bookmark search engine 10 via the communication line 8 time information is acquired and the timer of the gateway device 11 is proofread by this time information. A predetermined reception means is provided in the gateway device 11 and the time information included in television broadcasting or a radio broadcast is received and it may be made to proofread the timer of the gateway device 11 based on the received time information.

[0072]In the gateway device 11 the difference of the counted value in the case of operation of the button 20 by a user transmitted by the book maker 4 and the counted value at the time of transmission from the book maker 4 being performed is called for. If the cycle of count-up the book maker's 4 counter is known beforehand because only the time corresponding to the counted value of difference goes back based on the timer of the gateway device 11 which generates a master clock on the basis of the time when transmission from the book maker 4 was performed. In the book maker 4 a user can operate the button 20 and it can ask for the time when counted value was memorized by the memory 26 correctly.

[0073]If this method is used the necessity of forming the indicator 21 which gives the book maker 4 a clock (timer 28) and a time stamp will be lost. If this method is used there is no necessity of proofreading the book maker's 4 timer 28 and it is desirable.

[0074]In the book maker 4 in using a counter instead of a timer the counted value of a counter turns into a value corresponding to time information.

[0075]When the book maker 4 is connected to the gateway device 11 for example also when the cycle of the book maker's 4 counter is unknown management becomes possible by setting fixed time and measuring the counted value of the book maker's 4 counter with the gateway device 11.

[0076]Although **** explained that a counter counted with the clock of a given period this is not limited to this example. A counter can be operated with the clock generated to arbitrary timing if counted value and the time from for example a count start time are matched. For example a counter can be operated with a shift register and the clock based on an M sequence generated using an exclusive OR circuit. For example the cycle of a clock may be changed periodically and a counter may be operated. Of course it is necessary to know of what kind of clock the book maker 4 has a counter in the gateway device 11 side. By using such a clock in order to operate a counter it becomes possible to prevent illegal manufacture and use of the book maker 4 for example.

[0077]Although it asked for the time when the button 20 was pushed by the book maker 4 on the gateway device 11 in **** this is not limited to this example. For example in the gateway device 11 the time information which shows the time when the button 20 was pushed by the book maker 4 and the time information which shows the time when transmission of time information was performed to the

gateway device 11 from the book maker 4 are searched for. And such time information is transmitted to the search engine 10 and it can ask for the exact time when the button 20 was pushed based on the master clock of the search engine 10.

[0078]The book maker's 4 timer 28 or above-mentioned counter is good also as operation like a stopwatch further again. That is when the button 20 is operated first operation is started and Measurement Division of time or the coefficient of counted value is started. If as for this timer 28 or countertime information (or counted value) is transmitted to the gateway device 11 from the book maker 4 it will be reset and operation will be suspended. And when the button 20 is operated next operation of the timer 28 or a counter is started again. By carrying out like this the power consumption in the book maker 4 can be saved.

[0079]Next the content retrieval processing by the system shown by above-mentioned drawing 2 is explained using the flow chart of drawing 9.

First registration to the bookmark search engine 10 of the book maker's 4 terminal ID27 which a user owns is performed by the first step S10 in a procedure which was mentioned above.

[0080]The user can make time information memorize at arbitrary places such as inside of a street or a car using this book maker 4 by whom terminal ID27 was registered. For example if the musical piece reproduced with the radio with which it was equipped in the train is pleasing the book maker's 4 button 20 will be pushed on that spot. The time information on which the button 20 was pushed is memorized by the book maker's 4 memory 26 (Step S11). Two or more time information is memorizable in the range of the storage capacity of the memory 26 which the book maker 4 builds in (Step S12).

[0081]At Step S13 the book maker 4 and the gateway device 11 (in drawing 9 it is called G-D for short) are connected. At the following step S14 the time information memorized by the book maker's 4 memory 26 is read with terminal ID27 and is transmitted to the gateway device 11 via predetermined Interface Division mentioned above. Processing of this step S14 can be automatically started if the book maker 4 and the gateway device 11 are connected at the above-mentioned step S13. And the time information and terminal ID27 which were transmitted to the gateway device 11 from the book maker 4 are transmitted to the bookmark search engine 10 from the gateway device 11 via the communication line 8 at the following step S15.

[0082]In the bookmark search engine 10 search of information is performed by Step S16 based on time information and terminal ID27 transmitted from the gateway device 11. Time information is used as a search condition. For example if musical piece information wants to know the database 1 will be searched based on time information and the track name etc. of the musical piece currently broadcast in radio station each office will be outputted to the time shown by time information based on the play list of each broadcasting station accumulated in the database 1.

[0083]In the case of search a search condition is narrowed down using the registration information of the user in Step S10 in this step S16 mentioned above.

The database 2 is searched based on terminal ID27 transmitted from the gateway device 11 and a user's registration information registered as terminal ID27 is outputted. This registration information is further used as a search condition.

[0084]For example when you search a play list with the database 1 and you register terminal ID27 into the bookmark search engine 10 at the above-mentioned step S10 let only the play list of a specific broadcasting station be a retrieval object using the information on a broadcasting station that it was inputted into the "radio station" column 45.

[0085]In this way if a play list is searched about the target broadcasting station (Step S17) search results will be returned to a user. That is the search results in the bookmark search engine 10 are transmitted to the gateway device 11. It is checked whether the information which displays the transmitted search results on a display screen which mentions an example later and for which the user needs them has been retrieved in the gateway device 11 (Step S18).

[0086]When the information which the user needs for search results is not included it is transmitted to the bookmark search engine 10 from the gateway device 11 that and at Step S19a search condition is changed and search is performed again. For example the object of the broadcasting station as a search condition is extended based on the information into which it was inputted by the "zip code" column 43 and the "long-distance number" column 44 at all broadcasting stations receivable within limits specified using these information. The object of not only this but the broadcasting station as a search condition may be extended in the area contiguous to the area into which it was inputted by the columns 43 and 44 for example.

[0087]In the re retrieval in Step S19a search condition can be automatically set up by the bookmark search engine 10 side. For example the contents of registration which the user registered by processing of Step S10 are gradually applied to the search condition. A user can set up directly the search condition in the case of re retrieval. A new search condition is inputted into the gateway device 11 by the user. The inputted search condition is transmitted to the bookmark search engine 10 from the gateway device 11.

[0088]In this way search of the information which a user needs will transmit the information retrieved at Step S20 to the gateway device 11 from the bookmark search engine 10. For example when the information on a musical piece is being retrieved the searched voice data of a musical piece is transmitted to the gateway device 11 from the bookmark search engine 10. The voice data of a musical piece can be accumulated in the database 2. Not only in this it was mutually connected for example on the Internet the voice data of a musical piece is required from a website in addition voice data may be made to be transmitted from a website.

[0089]The user can store the transmitted voice data in the hard disk 36 of the gateway device 11 for example for example can play it by the speech processing means 39 and the loudspeaker 90. And if the musical piece of this voice data is pleasing it can communicate with the bookmark search engine 10 using the gateway

device 11 and the purchase of the albums (CD etc.) in which this musical piece was recorded can be required.

[0090] Drawing 10 shows an example of the display screen of the gateway device 11 after Step S18. User name 51 and terminal ID27 and the area 52 of a user's registration information are displayed on the upper part of a screen. The input column is omitted in the registration picture of drawing 8 which the area 52 mentioned above. In this example the user has registered four broadcasting stations of three radio stations "AAAA" BBBB and "CCCC" and one CATV (Cable Television) broadcasting station "DOD" for example.

[0091] The search results about broadcast of four broadcasting stations in the bookmark search engine 10 based on the one time information 53 registered into the book maker 4 are displayed as the displays 545556 and 57. In this example the musical piece is broadcast at the time shown in the time information 53 in a broadcasting station "AAAA" BBBB and "DOD." On the other hand advertisement and promotion are broadcast at the broadcasting station "CCCC." When the display 54 which shows the broadcasting station "AAAA" is taken for an example under a broadcasting station name and the frequency band information on broadcast. The jacket picture 54A of CD in which the musical piece which the broadcasting station "AAAA" was broadcasting at the time of the time information 53 is recorded is displayed. A track name and the singer name 54B are displayed on the bottom of it and the selling price 54C of the CD concerned is displayed.

[0092] Furthermore under it is common at each broadcasting station where the musical piece was broadcast and the buttons 58 59 and 60 which can be operated are virtually arranged by the user interface of the gateway device 11 respectively. By operating the button 58 the voice data of the musical piece concerned is transmitted to the gateway device 11 from the bookmark search engine 10 and it is reproduced by the loudspeaker 90 through signal processing of the voice processing part 39. When the button 58 is operated the transmitted voice data is not memorized by the predetermined memory storage 36 for example a hard disk.

[0093] The user can choose the musical piece to wish out of the musical piece broadcast and searched at each registered broadcasting station with the voice data of these jacket pictures 54A a track name and the singer name 54B and a musical piece etc.

[0094] The button 59 is used to purchase CD in which the musical piece concerned is recorded for example. The voice data of the musical piece concerned is downloaded for example for example the button 60 is used for the hard disk 36 to memorize. When the buttons 59 and 60 perform the purchase of CD or download of a musical piece based on the number inputted for example in the "card No." column 46 of drawing 8 a price can be charged directly to a credit card or an ATM card.

[0095] Although the buttons 58 59 and 60 are not displayed to broadcast of the advertisement and promotion of a broadcasting station "CCCC" in the example of drawing 10 it is also possible to provide separately a button to which it applies for the purchase of the goods currently displayed.

[0096] The information by other registration broadcasting stations can be displayed

by operating the button 61 when there are many broadcasting stations registered and it cannot display at once to Screen 50.

[0097] Although the book maker 4 explained by **** as a device for exclusive use which memorizes time information this is not limited to this example. For example it is easy to give the book maker's 4 function to portable communication equipment [PHS / (Personal Handy Phone System) / a cellular phone]. The button 20 can be arranged to apparatus with a dialing key etc. and the telephone number registered into apparatus can be used as terminal ID27. It may be made to realize the function of the button 20 in a predetermined combination of a dialing key. Similarly it is also easy to give the book maker's 4 function to the receiver of GPS (Global Positioning System). Since a user's position can be limited when the book maker's 4 function is given to the apparatus it is made to have detection of a position performed PHSGPSetc. can perform more exact search which narrows down a broadcasting station etc.

[0098] The small portable information machines and equipment called PDA (Personal Digital Assistant) can be used as the book maker 4. In this case the book maker's 4 function is provided as software to PDA and PDA performs operation as the book maker 4 virtually.

[0099] The cellular phone which can respond to the connection service to the Internet can be used as the gateway device 11 further again. For example one end of a strap is used as the connector 22 by making the strap for hanging a cellular phone with the book maker 4 and having into one structure and the other end is attached to a cellular phone. The connector is provided in the lower part so that the data transmitted to the Internet can generally be inputted into the cellular phone which can respond to the connection service to the Internet. When transmitting the time information memorized by the book maker 4 made in one with the strap to the cellular phone as the gateway device 11 it connects with the connector of the lower part of a cellular phone and the connector 22 of the end of a strap is used. Transmission of the time information from the gateway device 11 to the bookmark search engine 10 can be easily performed by accessing the Internet with a cellular phone.

[0100] As a modification of the 1st gestalt of this operation the button 20 is realizable by software in the gateway device 11. For example the function of the button 20 to memorize time information is assigned to the predetermined key of the gateway device 11 and the position on a screen. The function of the button 20 may be given to the predetermined icon displayed on a screen. Time information is memorized by operating the icon which has a function of the button 20 for example using pointing devices such as a mouse. Terminal ID27 is memorized in the predetermined region of ROM32 of the gateway device 10 RAM33 or the hard disk 36.

[0101] A user's operation of the icon etc. which were assigned to the gateway device 11 as the button 20 will memorize the time information which shows the time when the operation was made to the predetermined region of RAM33 or the hard disk 36. This memorized time information is read and time information and

terminal ID27 are both transmitted to the bookmark search engine 10 via the communication line 8. In the bookmark search engine 10 search is made based on the transmitted information and search results are transmitted from the bookmark search engine 10 via the communication line 8 to the gateway device 11.

[0102]In the case of search by the bookmark search engine 10 unique terminal ID27 is supplied to each book maker 4 from each of each book maker 4. If this terminal ID27 is used it can understand how many persons demanded and downloaded which musical piece for example and can use for market research etc.

[0103]Next the book maker's 4 more concrete example mentioned above is explained. If the book maker 4 is made as [memorize / to the timing for which a user asks / time information] he can take various gestalten.

[0104]Drawing 11 shows the gestalt of the book maker's 4 example. As shown in drawing 11 A in the gestalt of this example the notch sections 101 and 102 are formed in the book maker's 4 both ends. For example by letting a string a chain etc. pass to the notch sections 101 and 102 the book maker 4 can be made into Mr. Pendant and can be carried. The indicator 21 is formed in an approximately center part and the button 20 is formed in the lower part of the indicator 21.

[0105]The notch section 101 side serves as the cap 103 and the connector 22 for connecting with the gateway device 11 is stored in the cap 103. If the cap 103 is drawn out in the upper part as an example is shown in drawing 11 B the cap 103 will separate from book maker 4 main part and the connector 22 will be exposed. That is let the connector 22 be the structure made to project directly from book maker 4 main part. In this example it is assumed that the book maker's 4 Interface Division 29 supports USB and the connector 22 is a connector by the side of the male of USB.

[0106]By inserting the connector 22 of book maker 4 main part in the connector (female side) of Interface Division 37 in which the gateway device 11 corresponds since the connector 22 is made to project directly from book maker 4 main part. The book maker 4 and the gateway device 11 are connectable. When the connector of USB is used as A type when a personal computer is used for the gateway device 11 it is easy to take compatibility and desirability.

[0107]The case where book maker 4 main part and the gateway device 11 are not directly connectable as mentioned above mechanistically depending on the structure of the connector circumference of the gateway device 11 for example is possible. So in the gestalt of this example the translator in which the connector by the side of the female of USB and the path cord to the gateway device 11 were formed is used. This translator is called a cradle. Drawing 12 shows the appearance of an example of this cradle 110 and shows signs that the cradle 110 is equipped with the bookmark 4.

[0108]The cradle 110 of this example has hemispherical appearance and let it be the structure where the connector 111 by the side of the female corresponding to the book maker's 4 connector 22 (male side) is formed in a vertex part. Of course the appearance of the cradle 110 is not restricted hemispherical but can be made into arbitrary shapes such as a rectangular parallelepipeda pyramid other still

more complicated shape. The path cord 112 for connecting with the gateway device 11 is pulled out from the connector 111.

[0109]By connecting the path cord 112 to the predetermined connector of the gateway device 11 inserting the book maker's 4 connector 22 in the connector 111 of the cradle 110 and equipping the cradle 110 with the book maker 4. It becomes possible to transmit the time information memorized by the book maker's 4 memory 26 to the gateway device 11.

[0110]The number of the time information memorized by this book maker 4 now is shown to the indicator 21 by the displays 100100 and 100...100' of ball state by control of CPU25. The book maker 4 can generate the classification information corresponding to time information and can make the memory 26 memorize time information and classification information with the operation method of the button 20 as mentioned above. This classification information can be made to reflect in the display which is displayed on the indicator 21 and which shows time information.

[0111]In the gestalt of this example as shown in drawing 11 the ball state display 100 displayed as a black dot and ball state display 100' displayed as a white round head are expressing classification information. For example the ball state display 100 is a display corresponding to the operation of the button 20 based on a radio broadcast and ball state display 100' is the display corresponding to the operation of the button 20 based on television broadcasting. Although the graphic display is omitted the display corresponding to the operation of the button 20 based on the outside of area is also displayed with another method of presentation.

[0112]Of course time information may be displayed not only with a black dot display and a white round display but with other methods of presentation. For example it may be made to express the number of cases actually memorized numerically. The number of cases which is already memorized and is deducted from the number of cases memorizable to the book maker 4 and it can display.

[0113]The display of the above-mentioned indicator 21 can change when transmitting the time information memorized by the book maker's 4 memory 26 to the gateway device 11. Drawing 13 shows the example of a display of the indicator 21 at the time of transmission. Drawing 13 is shown after the cap 103 in above-mentioned drawing 11 has been suitable caudad. Time has passed in order of drawing 13 A, drawing 13 B and drawing 13 C. In drawing 13 A in the ball state displays 100 and 100' as which seven pieces were displayed the number of displays is gradually reduced with progress of time and it is displayed so that it may absorb in the direction of the connector 22 and a display may be changed. The data memorized by the memory 26 is sucked up by the gateway device 11 via the connector 22 by this and signs that data is transmitted are expressed virtually.

[0114]It is possible to perform the display at the time of this transmission also like the gateway device 11. It can be made to output a sound to the gateway device 11 in connection with change and the passage of time of a display by providing a sound reproduction section in the case of transmission. Actual data transfer is extremely performed for a short time compared with the reduction speed of the

number of displays of the indicator 21 and there is no necessity of making a actual transfer rate and the variation speed of a display of the indicator 21 corresponding. Thus the user can grasp intuitively having transmitted time information to the gateway device 11 with changing a display with progress of time or outputting a sound when transmitting the time information memorized by the memory 26.

[0115] The display at the time of transmission is variously considered besides ***. For example a certain character can be displayed in the gateway device 11. The display of the book maker's 4 indicator 21 and the display of the gateway device 11 are interlocked and signs that data is transmitted to the gateway device 11 from the book maker 4 can be displayed continuously.

[0116] Drawing 14 shows the modification of the gestalt the above-mentioned book maker's 4 example. This is an example which has not formed the lower notch section 102 to the gestalt of the above-mentioned book maker's 4 example.

Drawing 14 A shows signs that it equipped with the cap 103 and drawing 14 B shows signs that removed the cap 103 and the connector 22 was exposed. The button 20 comprises an example of this drawing 14 so that it can be pushed in and operated from the lower part.

[0117] Drawing 15 shows other modifications of the gestalt the above-mentioned book maker's 4 example. This is an example which is the display 120 with a cylindrical display of the number of the time information of the indicator 21 to the gestalt (refer to drawing 11) of the above-mentioned book maker's 4 example.

Drawing 15 A shows signs that it equipped with the cap 103 and drawing 15 B shows signs that removed the cap 103 and the connector 22 was exposed.

[0118] Drawing 16 shows the modification of further others of the gestalt of the above-mentioned book maker's 4 example. This is the example which did not form the notch sections 101 and 102 and formed the skid part 130 which comprises rubber in the side of the book maker's 4 main part to the gestalt (refer to drawing 11) of the above-mentioned book maker's 4 example. In this example it is the area display 131 in the indicator 21 with number-of-cases presenting of time information is made. Drawing 16 A shows signs that it equipped with the cap 103 and drawing 16 B shows signs that removed the cap 103 and the connector 22 was exposed.

[0119] Drawing 17 shows the example of other gestalten of the book maker 4. In this example the ring 150 is attached to the book maker's 4 cap 103 and where the book maker 4 is equipped with the cap 103 the book maker 4 can be used as a key case.

[0120] The book maker 4 by whom it is shown to above-mentioned drawing 14 - drawing 17 can make the cradle 110 mentioned above apply.

[0121] Drawing 18 shows the example of the gestalt [of the book maker 4] of further others. The book maker 4 comprises this example in the shape of a wristband. The indicator 21 comprises a lighting part which consists of two or more LED (Light Emitting Diode) which turns on only the number corresponding to the number of the memorized time information. All the lighting parts are made to turn on beforehand and it may be made to switch off a lighting part according to

the number of the memorized time information. As for the connector 22 the path cord 140 is pulled out from the end of book maker 4 main part and the connector 22 is formed in the termination of the path cord 140. The mechanism which the connector 22 can attach is formed in the other end of book maker 4 main part and the book maker 4 whole makes ring shape by attaching the connector 22 using this mechanism.

[0122] Drawing 19 shows another example of the book maker's 4 gestalt. For example like a clock the book maker 4 by whom it is shown to this drawing 19 places on a desk etc. and is made to be used. The button 20 is formed in the book maker's 4 upper surface and the indicator 21 is formed in a front face. In this example representing of the time information memorized in the squares 160 and 160 is made. For example it is smeared away black the square 160 shown expresses the time information based on a radio broadcast and square 160' shown in white expresses the time information based on television broadcasting. The position of a display is decided at random for example to the turn of memory of time information. The connector 22 for connecting with the gateway device 11 is formed in the rear-face side which is not illustrated for example. The connector by the side of the female of USB is provided also in the book maker 4 side and it may be made for both ends to connect with the gateway device 11 in the example of this drawing 19 with the path cord which is a male side.

[0123] A maximum can be provided in the number of a hour entry memorizable to the book maker 4. For example the time and effort of next search is considered and a memorizable maximum is made into several affairs or about about ten affairs. When the memory number of time information reaches a maximum at this time or when a maximum approaches it is good to make it a user notified that by a certain method. For example it is possible to prepare the book maker 4 sound generation means such as a beep sound. A beep sound is generated when the button 20 is operated and time information is memorized using this sound generation means and the memorizable number of cases remains and it becomes one affair. A beep sound is generated when the memorizable number of cases is 0 and the button 20 is pushed.

[0124] The sound by a sound generation means is not restricted to an above-mentioned beep sound. For example a predetermined sound can be generated whenever the book maker's 4 button 2 is operated by the user. By carrying out like this even if a user does not look at the book maker's 4 indicator 21 he can know that the button 20 was pushed certainly. The sound which changes with how to push the button 20 can be generated.

[0125] It is also possible to prepare the book maker 4 a Cancel button and to enable it to delete the memorized time information for example sequentially from an old affair or a new affair. The memorized time information is chosen and it can delete.

[0126] The book maker 4 can include not only in an above-mentioned example but in other various electronic equipment. For example the book maker 4 can include for example in a radio set. It can also carry in the car stereo system carried in a car.

Of course the object incorporating the book maker 4 is not restricted to electronic equipment. When the book maker 4 includes in a thing of movement which is carried in the case [a thing] and used he is preferred.

[0127] In ****the button 20 was prepared for the book maker 4 only one as a final controlling element for memorizing time information and pushing apart this button 20 was generating two or more classification flags. This is not limited to this example but prepares the book maker 4 two or more buttons and it may be made to assign a classification flag which is different in each. For example the button 20 for radios and button 20' for Television Sub-Division can be provided respectively. It is the combination of two or more buttons and the classification flag of various sorts can be generated further.

[0128] The final controlling element for memorizing the book maker's 4 time information is not restricted to a push button. For example the rotary switch with which a point of contact switches is formed and it may be made to memorize time information by operating this rotary switch by making it rotate. The touch sensor which detects contact of a human body can also be used as a final controlling element.

[0129] Although Interface Division of USB etc. it is made to have connection between the book maker 4 and the gateway device 11 data transfer made in a computer system is used in ****this is not limited to this example. That is since there is very little data volume transmitted to a gateway device from the book maker 4 late Interface Division of a data transfer rate can be used more for it. For example it is also possible to transmit data with the usual shielded wire which is used for headphone.

[0130] The book maker 4 can also realize as software on a personal computer further again. In this case although the personal computer with which the book maker 4 is constituted may be prepared separately when the gateway device 11 is a personal computer this gateway device 11 itself can be used as the book maker 4. The book maker 4 is downloaded for example from communication networks such as the Internet and the software for realizing on a personal computer can obtain him. Of course this software is recorded on recording medias such as CD-ROM and it may be made to distribute or sell it.

[0131] It can obtain from other websites via the bookmark search engine 10 to which the gateway device 11 is connected. The software concerned is placed on the bookmark search engine 10 and it may be made to download directly from the gateway device 11. Time information is memorized by predetermined operation being performed on the personal computer with which the software with which the book maker 4 is realized was started by the user.

[0132] The program itself which operates the book maker 4 can be downloaded. For example in the book maker 4 ROM91 is electrically constituted from an EEPROM (Electrically Erasable Programmable ROM) which can rewrite a memory content. It is made to make ROM91 memorize the program supplied via Interface Division 29 from the gateway device 11 etc.

[0133] If it carries out like this in an initial state the book maker 4 can be changed

into an usable state by writing a program in ROM91 as a state where it is memorized by ROM91 in no programs according to a predetermined procedure.

[0134]For example in the case of the book maker's 4 user registration the book maker 4 is connected to the gateway device 11 and terminal ID27 is transmitted from the book maker 4 to the bookmark search engine 10 via the gateway device 11. If user registration is made normally the program for the motion control of the bookmark 4 will be transmitted to the gateway device 11 from the bookmark search engine 10 and this program will be transmitted to the book maker 4 via Interface Division 29 from the gateway device 11. The transmitted program is written in ROM91 and it changes the book maker 4 into an usable state.

[0135]It may be made to make ROM91 memorize beforehand the boot program of CPU25 and the program of the communications control by Interface Division 29.

[0136]It can respond to upgrade of the book maker's 4 motion-control program etc. by making ROM91 rewritable. For example a program downloads from the network connected to the gateway device 11 the downloaded program is transmitted to the book maker 4 and the contents of ROM91 are rewritten.

[0137]When a user chooses the program transmitted in this way the display of the indicator 21 etc. can make a user's favorite thing selectable for example and it is desirable.

[0138]The program of the book maker's 4 motion control can be transmitted from other sites connectable not only with the bookmark search engine 10 but the gateway device 11.

[0139]The book maker's 4 control program can also be distributed in the state where it was not restricted to the download from a network for example was recorded on recording media such as CD-ROM and a floppy (registered trademark) disk as mentioned above. In the gateway device 11 the program recorded on these recording media is read it is transmitted to the book maker 4 and the contents of ROM91 are rewritten.

[0140]Next the application of the 1st gestalt of this operation is explained. In the application of the 1st gestalt of this operation as the gateway device 11 it is installed in the above-mentioned retail store else [such as a personal computer which a user owns] etc. and a user uses the information terminal equipment made available.

[0141]This information terminal equipment is installed in for example comparatively large-scale CD store what is called a convenience store etc. and is connected to a predetermined network. It enables it to obtain a user in the selected information by operating it according to the menu displayed on the screen of this information terminal equipment. The acquired information can be acquired for example as recording media such as a check in a screen a floppy disk and CD-ROM. It is also possible to transmit the acquired information to the information machines and equipment which provided predetermined Interface Division in information terminal equipment and the user brought and which have corresponding Interface Division as data directly. Below this information terminal equipment is called a "KIOSK terminal."

[0142] Since a KIOSK terminal is realizable with the composition of a common computer as shown for example in above-mentioned drawing 7 and the same composition as abbreviation detailed explanation of composition is omitted. For example a KIOSK terminal has a bus and CPU and a memory are connected to a bus. The display and input interface for realizing GUI to a bus are connected and it has mass storage such as HDD a data output means the connecting means to a network etc. further.

[0143] Although a graphic display is omitted this KIOSK terminal and the above-mentioned bookmark search engine 10 are connected. Interface Division corresponding to the connector 22 prepared for the book maker 4 who mentioned above to this KIOSK terminal is established and it carries out as [be / between the book maker 4 and a KIOSK terminal / transmission of data / possible]. By using this KIOSK terminal even if the user does not own or possess the gateway device 11 by himself he can use the search service using the book maker 4 who mentioned above.

[0144] A KIOSK terminal is always connectable with a communication line with a more nearly high-speed data transfer rate as compared with the network used at a general home. Storage such as a memory and HDD can also carry a more nearly mass thing. Therefore the user can receive different service from the case where a personal computer is used as the gateway device 11 by using a KIOSK terminal.

[0145] For example a memory with a comparatively big storage capacity is carried in the book maker 4. This book maker 4 is connected to a KIOSK terminal and music data is searched using a KIOSK terminal based on the time information memorized by the memory 26. A display as shown for example in above-mentioned drawing 10 is made by the display of a KIOSK terminal. When the sound reproduction means is provided in the KIOSK terminal it can reproduce and try listening the music data of search results by the sound reproduction means of a KIOSK terminal by operating the button 58.

[0146] The music data of search results is downloadable to the book maker 4 via the connector 22 by operating the button 60. When downloading at this time if fee collection is required it is downloadable by investing prescribed amount of money in the money slot further provided in the KIOSK terminal. As for the downloaded music data a user is behind transmitted to a personal computer music data playback equipment for exclusive use etc. When compression encoding of the music data to download is carried out with the predetermined compression encoding system it can save memory space and download time and is preferred.

[0147] As a compression encoding system of music data for example MP3 (Moving Picture Experts Group 1 Audio Layer 3) and ATRAC (Adaptive Transform Acoustic Coding) ATRAC2 and ATRAC3 which improved the ATRAC method further can be used. Not only these but PASC (precision adaptive sub-band coding) TwinVQ (trademark) RealAudio (trademark) LiquidAudio (trademark) etc. can also be used for a compression encoding system.

[0148] At this time by carrying the predetermined decoder and sound reproduction means corresponding to a music data compression encoding system in the book

maker 4 it downloads and is stored in a memory music data is decrypted and it can play. Thereby the user can reproduce and enjoy the downloaded music data only using the book maker 4. The voice reproduction system using headphone etc. as a sound reproduction means can be considered.

[0149] When downloading music data to the bookmark 4 directly the problem of the copyright of the downloaded music data may arise. This can be beforehand enciphered with a predetermined cipher system to the music data to download and can be solved by making the book maker 4 build in the mechanism which decrypts the enciphered music data. For example decryption is made only when reproducing the enciphered music data by the book maker 4. Even if the music data downloaded to the book maker 4 is transmitted to a personal computer etc. unless the user has a key which solves this encryption with the available gestalt with the personal computer it keeps decryption from being possible.

[0150] If sale of an audio CD etc. is possible for the retail store in which this KIOSK terminal is installed further again for a user the audio CD based on the search results by the time information memorized by the book maker 4 can make purchase possible. For example the order sheet based on search results is published and a user brings this to a counter and places an order for it. The audio CD based on search results can be directly discharged from a KIOSK terminal by including the cart system for conveyance of an audio CD in a KIOSK terminal.

[0151] Next the purchase of an audio CD based on the search of music data and search results based on the time information memorized by the book maker 4 by the 1st and 2nd gestalten of operation mentioned above is explained more concretely. Drawing 20 and drawing 21 are flow charts which show roughly a process after a user obtains the book maker 4 until it purchases an audio CD. Drawing 22 – drawing 27 show the example of the display screen displayed on the gateway device 11 in connection with the flow chart of drawing 20 and drawing 21. Drawing 20 and drawing 21 are flow charts which show a continuous process and "A" and "B" in drawing 20 show that a process shifts to the corresponding part in drawing 21 respectively.

[0152] In order for a user to use the book maker 4 it is necessary to register as a user to the book maker 4 who holds. In drawing 20 when user registration can already be managed with the first step S30 it shifts to Step S33. Although the book maker 4 is held when user registration is not settled the book maker 4 is connected to the gateway device 11 at Step S31 and it registers as a user at Step S32 according to predetermined operation of the gateway device 11. The personal computer which a user possesses may be sufficient as the gateway device 11 and the KIOSK terminal mentioned above may be sufficient as it. If user registration is made a process will shift to Step S33.

[0153] If user registration is made to the book maker 4 at Step S33 when bookmark operation i.e. a pleasing musical piece etc. is heard the button 20 will be pushed by the user and it will be directed to the book maker 4 so that the time information at that time may be memorized. As mentioned above the time information which is how to push the button 20 and is memorized is classified (Step S34). In memory

out of the area registered into user registration beyond as for predetermined time the button 20 continues being pushed (Step S35). If it is memory based on a radio broadcast the button 20 will be pushed only once momentarily (Step S36). If it is memory based on television broadcasting the button 20 will be twice pushed into predetermined time (Step S37). Thus if a button is pushed the time information on which the button 20 was pushed identification information and the classification flag classified according to how to push the button 20 will be memorized by the memory 26 of the bookmark 4 at Step S38.

[0154] If one or more and time information are memorized by the book maker's 4 memory 26 the memorized time information can be swept out in it from the memory 26 and search by the bookmark search engine 10 can be performed in it (Step S39). Since it searches as for that a process shifts to Step S40. If the book maker 4 furthermore wants to memorize time information a process will return to Step S33.

[0155] As mentioned above search by the time information memorized by the book maker 4 is performed by the personal computer (PC) which a user possesses and connecting the book maker 4 to this gateway device 11 by using a KIOSK terminal as the gateway device 11. If it searches by using as the gateway device 11 the personal computer which a user possesses a process will shift to Step S41. The book maker 4 is connected to a personal computer at Step S41. In a personal computer the Internet is accessed and the bookmark search engine 10 which refers to Step S42 by the book maker 4 is connected to an available website.

[0156] The time information memorized by the book maker's 4 memory 26 from the book maker 4 to the personal computer is transmitted. Drawing 22 shows an example of the time information selection picture 200 displayed on a personal computer when time information is transmitted to a personal computer. In this example time information (1) – (9) memorized by the book maker 4 is transmitted to a personal computer and the time and time when that time information was memorized about each of time information (1) – (9) are displayed on the displays 201–209.

[0157] A user chooses the information on hope from these displays 201–209. For example it determines by choosing the thing of hope from the displays 201–209 and pushing the button of a mouse by the cursor display to which the inside of a screen is moved in connection with pointing devices such as a mouse and a motion of a mouse. The selected information is transmitted to the bookmark search engine 10 from a personal computer with terminal ID27 of the book maker 4. Data transmitting uses terminal ID27 as a header for example and the classification flag corresponding to time information and its time information has the composition made into the pair.

[0158] Based on time information and terminal ID27 transmitted the title information of the musical piece currently broadcast at the broadcasting station which was associated and was registered into terminal ID27 at the time (and time) shown in time information is searched with the bookmark search engine 10. At this time search is suitably performed from a radio station and a television station

corresponding to the transmitted classification flag. When a television station is made into a retrieval object the musical piece used as the theme song and insertion song of a musical piece and a drama program which do not stop at the musical piece broadcast by the musical program among television broadcasting for example are used by a commercial broadcast can also be made into the object of search.

[0159] When a classification flag is a flag which shows the outside of area let what was related with terminal ID27 was registered for example was broadcast from the user's area information based on a user's zip code etc. at the broadcasting station out of the range be an object of search.

[0160] The search results obtained by the bookmark search engine 10 are transmitted to a personal computer. Drawing 23 shows an example of the search-results display screen 210 displayed on a personal computer based on the transmitted search results. In this example in above-mentioned drawing 22 the time information (2) of the display 202 is chosen by the user and search of musical piece information is made at the bookmark search engine 10 based on the selected time information (2). The acquired musical piece information 211212 and 213 is displayed as a result of search.

[0161] That is it is obtained as search results that the musical piece shown in the musical piece information 211212 and 213 at a broadcasting station "AAAA" a broadcasting station "ABCD" and a broadcasting station "BBBB" at 12:0 a.m. on October 181999 shown in time information (2) respectively was broadcast. A user's possibility of having listened to which musical piece among these and having operated the book maker's 4 button 20 at the time shown in time information (2) is high.

[0162] When a user operates the book maker's 4 button 20 operation of the button 20 is not necessarily performed at the moment with which a user hears at and is pleased. It is also considered enough that the button 20 is operated after a musical piece finishes. Therefore in the bookmark search engine 10 when some margin is given to the broadcasting hours of a musical piece in the case of search of musical piece information it is more desirable. In this case the musical piece information for two music is displayed for example like the display 217.

[0163] A user judges whether there is any musical piece which he listened to at the time shown by time information (2) and made the book maker 4 memorize seeing presenting of the musical piece information 211212 and 213 on this search-results screen 210 (Step S43). The LISTEN button 215 arranged on the inside of presenting of the musical piece information 212213 and 214 is operated to try listening a musical piece (Step S45). Operation of the LISTEN button 215 will display the audition screen 220 for trying listening the musical piece where an example is shown in drawing 24.

[0164] That is operation of the LISTEN button 215 will transmit from a personal computer which button 215 was operated among the indicators of the musical piece information 212213 and 214 to the bookmark search engine 10. Here the LISTEN button 215 of the musical piece information 213 should be operated for

example. Based on the transmitted informationthe information on an audio CD that the musical piece concerned was recorded by the database 1 is retrieved in the bookmark search engine 10. As the information on the searched audio CD is transmitted to a personal computer and an example is shown in the audition screen 220the accompanying information of audio CDssuch as a musical piece name recorded on the audio CDis looked through and displayed on the CD information display sections 221.

[0165]In the example of drawing 24the final controlling element for controlling playback of a musical piece is allotted on the right-hand side of the CD information display sections 221. By operating the PLAY button 222it can try listening the musical piece corresponding to the LISTEN button 215 in which **** was operated. A user's operation of the PLAY button 222 will transmit the information which shows that to the bookmark search engine 10. For examplemusic data is accumulated in the database 1 of the bookmark search engine 10and the music data corresponding to the musical piece information chosen from the bookmark search engine 10 as the personal computer is transmitted.

[0166]It may be made to transmit music data from other websites where the book KAKU search engine 10 was connected in the network.

[0167]A user tries listening the transmitted music data by the sound reproduction means 39 and the loudspeaker 90 which were provided in the personal computerfor example (Step S46). In drawing 24the final controlling element 223 is a volume slider for adjusting the volume of a reproduced sound. It is desirablewhen restriction is provided in the length reproduced among the performance time of a musical piece in an auditionfor examplefor 15 seconds after the head and important section of a musical piece is reproduced.

[0168]After judging whether there was any desired musical piece at Step S43he is trying to try listening the musical piece at Step S45 in the flow chart of drawing 21but it may be made to judge whether there was any desired musical piece by trying listening a musical piece. At Step S43when desired musical piece information is not acquired as search resultsas shownfor example in Step S44a search condition etc. can be set up by a manual and musical piece information can be acquired.

[0169]It is expected of the purchase of a desired musical piece by the user out of the musical piece information 211212and 213 on search results (Step S47). This is directly made from the displayed musical piece information 211212and 213 based on the result of an audition of Step S46. Although the purchase of a musical piece is mentioned laterit is made by purchasing the audio CD on which the musical piece was recordedfor example. Not only this but the purchase of a musical piece unit is possible.

[0170]When immediately not purchasing a musical piecethe purchase of a musical piece can be suspended (Step S48)and search results can be saved. When suspending the purchase of a musical piecethe musical piece information on search results can be saved in the website of the bookmark search engine 10

(Step S49). In the search-results screen 210in each musical piece information 211 and 212 and the SAVE button 215 in 213and the musical piece information–display screen 220. By operating the SAVE button 224the musical piece information on search results is saved with the information of a user called terminal ID27 in the database 2 in the bookmark search engine 10for example.

[0171]If the SAVE button 215 or the SAVE button 224 is operatedthe preservation screen 230 where an example is shown in drawing 25 will be displayedthe information 231 on the musical piece saved by the operation will be displayedand the information on the musical piece saved by the user is shown by list. In this preservation screen 230it can try listening a corresponding musical piece by operating the Listen button 233. The purchase of a corresponding musical piece can be directed by operating the Buy button 232. By operating the Delete button 234the information on a corresponding musical piece can be eliminated from this preservation screen 230and preservation of that musical piece can be canceled.

[0172]The purchase of a corresponding musical piece can be directed by operating the BUY button 216 of the search-results display screen 210the BUY button 225 of the audition screen 220or the Buy button 232 of the preservation screen 230. The information on a musical piece that purchase was directed is related with the information of a user called terminal ID27and is once stored in the predetermined memory area of the bookmark search engine 10 (Step S50). This memory area is called a shopping cart.

[0173]Drawing 26 shows an example of the shopping cart screen 240 which displays the contents of the shopping cart. A user wishes to purchase and the list 241 is displayed for the information on an audio CD that the musical piece stored in the shopping cart and its musical piece were recorded. The user can choose from this shopping cart screen 240 the store which actually purchases an audio CD (Step S51). Let the store which can place an order for an audio CD on a network be a manual operation button to be registered and for the buttons 242A242Band 242C move [plurality and] to the website of each store in this example. By operating these buttons 242A–242Cthe user can move to the website of a favorite store and can purchase an audio CD.

[0174]Although a graphic display is omittedthe edit display which performs the addition and deletion of the store of an audio CD which were registered can be displayed by operating the button 243.

[0175]As an examplethe example at the time of operating the button 242C is explained. If the button 242C is operatedit will be moved to the website of “CDSHOP C” from the website of the bookmark search engine 10 (Step S52). Drawing 27 shows the purchase screen 250 of an example at the time of moving to the website of “CDSHOP C.” In this examplethe purchase screen 250 is divided into two up and downand the upper part is used as Screen 251 of the website of the bookmark search engine 10and let the bottom be Screen 252 of the website of “CDSHOPOC.”

[0176]The data stored in the shopping cart of the book maker search engine 10 is transmitted to the website of “CDSHOP C” as it isand is displayed on the list 253

of purchasing commodities. If a user judges whether a price is suitable (Step S53) and is judged to be suitable based on the price information of each audio CD displayed on the list 253 he will direct the purchase of the audio CD displayed on the list 253 at Step S54. For example an audio CD corresponding respectively can be placed an order for and purchased to "CDSHOP C" by operating the BUY buttons 254A 254B 254C and 254D. The payment of the price registers the number of a user's credit card etc. into "CDSHOP C" beforehand for example and performs them by pulling down by a card.

[0177] At the above-mentioned step S53 when the shown price is not suitable a process is ended. As shown to drawing 21 by the dotted line it can return to the shopping cart screen 240 and a different store can also be chosen.

[0178] On the other hand at the above-mentioned step S40 when a KIOSK terminal is chosen a user connects the book maker 4 to the predetermined contact button of a KIOSK terminal via the connector 22 (Step S55). Time information identification information classification flag and terminal ID27 memorized by the book maker 4 is transmitted to a KIOSK terminal from the book maker 4. Based on these transmitted information musical piece information is retrieved in a KIOSK terminal. The presentation to the user of search results the audition of a musical piece the check of the existence of the intention of the purchase of an audio CD etc. are performed using predetermined GUI (Graphical User Interface) displayed on the display of a KIOSK terminal.

[0179] If a desired musical piece and musical piece information are found (Step S56) it will be judged whether the price of the audio CD on which the musical piece was recorded is suitable at Step S53 mentioned above. If suitable a user will purchase the audio CD at Step S54. A KIOSK terminal In this case since [for example] things are assumed when installed in CD store A desired musical piece is searched and if the title and CD number of an audio CD on which the musical piece was recorded are known the audio CD can be purchased as it is so that an audio CD may be purchased in the usual procedure in CD store.

[0180] Next the 2nd gestalt of implementation of this invention is explained. In the 1st gestalt of operation mentioned above although the retrieval object in the bookmark search engine 10 was only the musical piece broadcast by a radio broadcast and television broadcasting it is taken as the object of search of the goods in television broadcasting broadcast by commercials with the 2nd gestalt of this operation.

[0181] Drawing 28 shows the composition of an example of the search system by the 2nd gestalt of this operation. In drawing 28 the same number is given to the portion which is common in the composition of drawing 2 mentioned above and detailed explanation is omitted. In the 2nd gestalt of this operation since the goods broadcast by the commercial broadcast are made into the retrieval object the advertiser 500 exists. The advertiser 500 requests work of the commercials broadcast by the advertising agency 502 for example and can consider that the advertising agency 502 provides commercials to the broadcasting station 12.

[0182] The advertiser 500 has introduction of the goods which he advertizes by

above-mentioned commercials and the website 501 where the user who accessed enabled it to purchase the product on the Internet. The website 501 is made accessible from the gateway device 11.

[0183] On the other hand in the bookmark search engine 10 the database 1 in above-mentioned drawing 2 is broadcast contents database 1' and the database 2 becomes customer database 2'. The play list whom the broadcast times of the program broadcast at the broadcasting station 12 for example described is stored in broadcast contents database 1'. Only the information about the commercials it is broadcast at the broadcasting station 12 that play lists are may be described.

[0184] It is related with broadcast contents database 1' by the further above-mentioned play listThe advertiser name which is URL of the advertiser's 500 website 501 and the advertiser's 500 name which were mentioned above is storedit is related with broadcasting hours and the trade name advertized by commercials is stored further again. By namelythe thing searched by using broadcast times as a key in broadcast contents database 1'. The trade name advertized by the commercials broadcast by the broadcasting hours used as URL of advertiser's 500 name and the advertiser's 500 website 501 and a key can be obtained as search results.

[0185] Terminal ID27 for every book maker 4 and the data of the book maker's 4 user are stored in customer database 2' like the 1st gestalt of above-mentioned operation. The information about a user's taste of a user's favorite radio stations TV programetc. which are registered by terminal ID27 is also storable in customer database 2' further.

[0186] In the 2nd gestalt of this operationInterface Division 503 which enabled it to update easily the predetermined information stored in broadcast contents database 1' from the exterior is formed in the bookmark search engine 10. For examplethe advertiser 500 can update the information about the commercials which the him of the play list stored in broadcast contents database 1' provides via this Interface Division 503. It may be made to perform updating by this advertiser 500 via the advertising agency 502. The broadcasting station 12 can update the play list about the contents which the broadcasting station 12 broadcasts via Interface Division 503.

[0187] The database management system which was made to perform access restriction via the predetermined filter can constitute such Interface Division 503for example to access from the outside to broadcast contents database 1'. Interface Division 503 is more preferred when the client of the exterior where access was permitted to broadcast contents database 1' has GUI whose updating was easily enabled in the contents of broadcast contents database 1'.

[0188] When the commercials which want to know information by television broadcastingworrysome commercialsetc. are broadcast a user operates the book maker's 4 button 20and makes the book maker's 4 memory 26 memorize time information in such composition. Behinda user connects the book maker 4 to the gateway device 11and transmits the time information memorized by the memory 26 to the gateway device 11 from the bookmark 4 with terminal ID27 etc. These

time information and terminal ID27 is further transmitted to the bookmark search engine 10 from the gateway device 11.

[0189]By terminal ID27 transmittedan user validation is performed and broadcast contents database 1' is searched with the bookmark transfer engine 10 based on time information. The trade name currently broadcast by URL and the commercials of advertiser's 500 name acquired by searching database 1' and the advertiser's 500 website 501 is transmitted to the gateway device 11.

[0190]A user using informationincluding the trade name etc. which were broadcast by URL and the commercials of advertiser's 500 transmitted nameand the advertiser's 500 website 501. Required information can be acquired about the commercials currently broadcast at the time shown by the time information which the book maker 4 was made to memorize. Since URL of the advertiser's 500 website 501 can be knownthe website 501 can be accessed using the gateway device 11and the information on other goods that OK and the advertiser 500 treat the information on still more detailed goods can be acquired.

[0191]If the purchase of goods is possible for the website 501 and it is madethe user can order goods from on the gateway device 11 to the advertiser 500.

[0192]If the information about a user's taste is stored in customer database 2'the advertiser 500The taste of the user who has accessed the website 501 can be known by searching customer database 2'and it becomes possible to provide information related to a user.

[0193]In the example of the 1st gestalt of above-mentioned operationby pushing the button 20 twice into predetermined timea classification flag becomes a thing corresponding to television broadcastingand can distinguish memory of the time information by television broadcasting at the bookmark search engine 10. By using thisit is possible to reconcile the search system by the 2nd gestalt of this operation and the composition data search system by the 1st gestalt of operation mentioned above.

[0194]For examplethe 1st final controlling element that makes the book maker 4 memorize the time information by a radio broadcastand the 2nd final controlling element that makes the time information by television broadcasting memorize are providedand the classification flag about the classification flag about a musical piece and commercials is generated by pushing apart the 2nd final controlling elementrespectively. It becomes possible to distinguish by the bookmark search engine 10 side about whether he would like to know the information on the goods currently advertized [that a user wants whether to know the information on the musical piece used by commercials also by the time information the broadcast times of commercials were remembered to beand] by commercials.

[0195]In the 2nd gestalt of this operationthe flow of money may occur between the advertiser 500the broadcasting station 12the bookmark search engine 10and a user. Drawing 29 shows roughly the flow of the money by which it is generated in the 2nd gestalt of this operation.

[0196]Firstthe charge M1 of a commercial occurs between the broadcasting station 12 and the advertiser 500. The charge M1 of a commercial moves to the

broadcasting station 12 from the advertiser 500. When a user accesses the advertiser's 500 website 501 and purchases goods further using the information acquired by the bookmark search engine 10the service charge M2 of the bookmark search engine 10 occurs. The service charge M2 moves to the bookmark search engine 10 from the advertiser 500. Using the information acquired from the bookmark search engine 10movement of the service charge M2 can also generate that the user accessed the website 501. When a user accesses to the website 501 for the information acquired from the bookmark search engine 10 and purchases the advertiser's 500 goodsthe price M1 for goods is paid to the advertiser 500 from a user.

[0197]

[Effect of the Invention]As explained aboveaccording to this inventionthe information corresponding to the time when the button was pushed is memorized by the book maker by pushing the button prepared for the book maker. The database with which the play list with whom the contents and the broadcast times of contents of each broadcasting station were related is accumulated in the information corresponding to this timeIt is effective in the ability to acquire the information on the contents currently broadcast at the broadcasting station when a book maker's button was operated by transmitting to the bookmark search engine which consists of a database which the pertinent information on contents and its contents was associatedand was accumulated.

[0198]Since the situation of transmission uses GUI and is graphically displayedwhen transmitting the information corresponding to time memorized by the book maker to a gateway device according to the 1st gestalt of implementation of this inventionWhen the user can grasp intuitively that the information memorized by the book maker was transmitted to the gateway device** has an effect that he can enjoy himself also visually.

[0199]The musical piece chosen from the search results which were searched with the bookmark search engine based on the information corresponding to the time memorized by the book maker according to the 1st gestalt of this inventionSince it can try listening with a gateway devicea user is effective in the ability to check directly the contents currently broadcast when he made a book maker memorize information.

[0200]According to this inventiona user is performing predetermined operation to a gateway device based on the search results which referred to the bookmark search engine using the information corresponding to the time memorized by the book maker further againIt can move to the site which can purchase the contents concerned. Thereforea user has an effect which can purchase the goods etc. with which he is pleased even from fragmentary memory.

[0201]According to the 1st gestalt of this inventionas search results searched with the bookmark search engine based on the information corresponding to the time memorized by the book makerSince the contents currently broadcast at the time memorized by that bookmark and the contents currently broadcast before in time than these contents are obtainedit is effective in the ability to have a margin

in a book maker's operation.

[0202] Since Interface Division which can change from the exterior the information stored in the database is established to the bookmark search engine according to the 2nd gestalt of this inventionThe contents of the database can be easily changed by the advertiser of goodsan advertising agencya broadcasting stationetc.and it is effective in the ability to respond to change of contents flexibly.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]It is an approximate line figure showing the information retrieval system by this invention roughly.

[Drawing 2]It is an approximate line figure showing an example of the composition of the composition data search system by the 1st gestalt of operation.

[Drawing 3]It is an approximate line figure showing a play list's example.

[Drawing 4]It is an approximate line figure showing an example of the appearance of the additional terminal by the 1st gestalt of operationi.e.a book maker.

[Drawing 5]It is a block diagram showing an example of the composition of the book maker by the 1st gestalt of operation.

[Drawing 6]It is an approximate line figure showing the example of the time information memorized by a book maker's memory.

[Drawing 7]It is a block diagram showing an example of the composition of a gateway device.

[Drawing 8]An example of a display a book maker's registration picture which the user and user by a gateway device own is shown.

[Drawing 9]It is a flow chart of an example of the content retrieval processing by this invention.

[Drawing 10]It is an approximate line figure showing an example of the display screen of the gateway device by the 1st gestalt of operation.

[Drawing 11]It is an approximate line figure showing the gestalt of a book maker's example.

[Drawing 12]It is an approximate line figure showing signs that a cradle is equipped with the appearance and the bookmark of an example of a cradle.

[Drawing 13]It is an approximate line figure showing the example of a display of the indicator at the time of transmission of time information.

[Drawing 14]It is an approximate line figure showing the modification of the gestalt a book maker's example.

[Drawing 15]It is an approximate line figure showing other modifications of the gestalt a book maker's example.

[Drawing 16]It is an approximate line figure showing the modification of further others of the gestalt of a book maker's example.

[Drawing 17]It is an approximate line figure showing the example of other gestalten of a book maker.

[Drawing 18]It is an approximate line figure showing the example of the gestalt [of a book maker] of further others.

[Drawing 19]It is an approximate line figure showing another example of a book maker's gestalt.

[Drawing 20]It is a flow chart which shows roughly a process after a user obtains a book maker until it purchases an audio CD.

[Drawing 21]It is a flow chart which shows roughly a process after a user obtains a book maker until it purchases an audio CD.

[Drawing 22]When time information is transmitted to a personal computerit is an approximate line figure showing an example of the time information selection picture displayed on a personal computer.

[Drawing 23]It is an approximate line figure showing an example of the search-results display screen displayed on a personal computer based on the transmitted search results.

[Drawing 24]It is an approximate line figure showing an example of the audition screen for trying listening a musical piece displayed on a personal computer.

[Drawing 25]It is an approximate line figure showing an example of the preservation screen for saving musical piece information displayed on a personal computer.

[Drawing 26]It is an approximate line figure showing an example of the shopping cart screen which displays the contents of the shopping cart.

[Drawing 27]It is an approximate line figure showing an example of the purchase screen at the time of moving to the website which can purchase an audio CD.

[Drawing 28]It is a block diagram showing the composition of an example of the search system by the 2nd gestalt of operation.

[Drawing 29]It is an approximate line figure showing roughly the flow of the money by which it is generated in the 2nd gestalt of operation.

[Description of Notations]

1 ... The database with which the play list by broadcasting media is accumulated
2 ... The database
3 in which the information about contents is accumulated ... Search engine
4 ... A book maker (additional terminal)
5 ... Place information
6 ... Broadcasting station information
7 ... Time information
10 ... A bookmark search engine
11 ... Gateway device
20 ... A book maker's input part
21 ... An indicator
22 ... Connector
25 [... Timer] ... CPU
26 ... A memory
27 ... Terminal ID
28 29 ... Interface Division
31 ... CPU
37 ... Interface Division
38 ... A means of communication
40 ... A registration picture
103 ... Cap
110 ... A cradle
200 ... A time information selection picture
210 ... Search-results display screen
220 [... A purchase screen
500 / ... An advertiser
501 / ... A website
502 / ... An advertising agency
503 / ... Interface Division] ... An audition screen
230 ... A preservation screen
240 ... A shopping cart screen
250
